

10/535704

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP03/01511

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> G02B6/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> G02B6/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2003  
 Kokai Jitsuyo Shinan Koho 1971-2003 Jitsuyo Shinan Toroku Koho 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 8-190026 A (Nippon Telegraph And Telephone Corp.), 23 July, 1996 (23.07.96), Par. No. [0031]; Fig. 10 (Family: none)	1-17
Y	JP 5-232322 A (The Furukawa Electric Co., Ltd.), 10 September, 1993 (10.09.93), Fig. 3 (Family: none)	1-17
Y	JP 11-72635 A (Kyocera Corp.), 16 March, 1999 (16.03.99), Fig. 1 & US 6118915 A & GB 2329259 A & FR 2765348 A	1-17

Further documents are listed in the continuation of Box C.  See patent family annex.

- \* Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "&" document member of the same patent family

Date of the actual completion of the international search  
05 March, 2003 (05.03.03)

Date of mailing of the international search report  
18 March, 2003 (18.03.03)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2000-180646 A (Fujitsu Ltd.), 30 June, 2000 (30.06.00), Figs. 11, 13, 27, 29, 32 (Family: none)	1-17
Y	JP 2002-243960 A (NTT Advanced Technology Corp.), 28 August, 2002 (28.08.02), Figs. 1, 3, 4 (Family: none)	16-17
A	JP 6-174954 A (Sumitomo Electric Industries, Ltd.), 24 June, 1994 (24.06.94), & US 5438640 A & EP 634677 A1	1-17
A	GB 2300726 A (The Furukawa Electric Co., Ltd.), 13 November, 1996 (13.11.96), & US 5764825 A & JP 8-304664 A	1-17
A	JP 3-240006 A (Sumitomo Electric Industries, Ltd.), 25 October, 1991 (25.10.91), (Family: none)	1-17